

## CLAIMS

- 5           1. A device for vibration control in a machine for  
cutting, said machine comprising a cutting tool supported  
by a tool holder, the device comprising a control unit  
and converting means which are connectible to the control  
unit and comprise a vibration sensor and an actuator, and  
the actuator comprising an active element, which converts  
10   an A.C. voltage supplied by the control unit to the  
actuator into dimensional changes, wherein said active  
element is adapted to be embedded in the body of the tool  
holder, and wherein said active element is adapted to be  
embedded in such manner that said dimensional changes  
15   impart turning moments to the body of the tool holder.
2. A device as claimed in claim 1, wherein said  
active element is adapted to be embedded with its centre  
axis spaced from the centre axis of the tool holder.
3. A device as claimed in claim 1, wherein said  
20   active element is adapted to be embedded close to the  
surface of the tool holder.
4. A device as claimed in claim 1, said tool holder  
being elongated and having an end portion which is  
adapted to be received in a mounting recess of the  
25   machine, wherein said active element is positioned along  
the tool holder such that, when the tool holder is held  
in said recess, a portion of said active element is  
within said recess.
5. A device as claimed in claim 4, wherein said  
30   portion of said active element consists of approximately  
half of said active element.
6. A device as claimed claim 1, wherein said active  
element is plate-shaped.
7. A device as claimed in claim 1, wherein said  
35   actuator comprises a double element which consists of two  
active elements which are attached to each other.

T.O. 210-3232360

Sub  
A2

Sub B1

Sub B1

Sub<sup>5</sup>  
Bb

Qabli

20  
Sub  
7/11

QubB1

30

35

15. A tool holder as claimed in claim 11, said tool holder being arranged to be mounted in a machine for boring, said tool holder being elongated and having an end portion which is adapted to be received in a mounting recess of the machine, wherein said active element is positioned along the tool holder such that, when the tool holder is held in said recess, a portion of said active element is within said recess.

16. A device as claimed in claim 15, wherein said portion of said active element consists of approximately half of said active element.

17. A tool holder as claimed in claim 11, wherein said active element is arranged in a recess in the tool holder and is connected with the tool holder via a glue joint which transfers at least part of said dimensional change to the tool holder, and that the recess is sealed.

18. A tool holder as claimed in claim 11, wherein said active element is arranged in a recess in the tool holder and has two opposite power transmitting surfaces, said power transmitting surfaces being engaged with surfaces of the body of the tool holder and said dimensional changes changing the distance between the power transmitting surfaces, and that the recess is sealed.

19. A tool holder as claimed in claim 11, the tool holder consisting of an insert holder for a turning lathe.

20. A tool holder as claimed in claim 11, the tool holder consisting of a teeth holder for a milling machine, wherein the teeth holder comprises active elements, which are helically arranged round the centre axis of the teeth holder.

21. A tool holder as claimed in claim 11, the tool holder consisting of a teeth holder for a drilling machine, wherein the teeth holder comprises active elements which are helically arranged round the centre axis of the teeth holder.

FOU240-62232360

Sub  
A31

Sub B1

Sub  
C31

Sub B1

22. A tool holder as  
er comprising an embed  
ent.
23. A tool holder as  
embedded elements are  
er.
24. A tool holder as  
active element is a p
25. Use of a device a  
ine, the machine being  
chine for milling or a

5

24. A tool holder as an active element is a part of the machine tool.

25. Use of a device as a machine, the machine being a machine for milling or a machine for turning.

10

[illegible]